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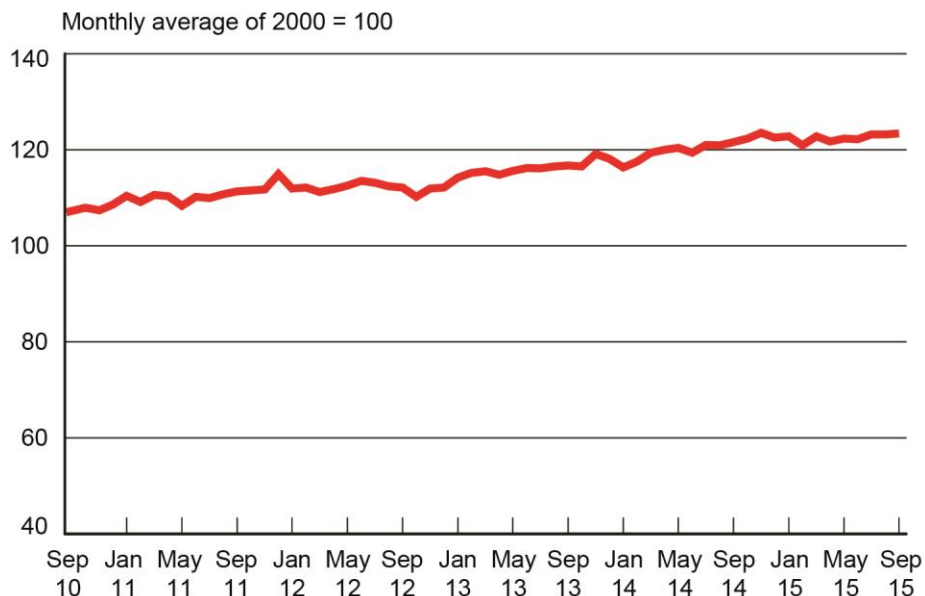
Contact: Dave Smallen

Tel: 202-366-5568

September 2015 Freight Transportation Services Index (TSI)

The Freight Transportation Services Index (TSI), which is based on the amount of freight carried by the for-hire transportation industry, rose 0.2 percent in September from the revised August level, rising after remaining unchanged in the previous month, according to the U.S. Department of Transportation's Bureau of Transportation Statistics (BTS). The September 2015 index level (123.4) was 30.3 percent above the April 2009 low during the most recent recession (Tables 1, 2, and 2A).

Freight Transportation Services Index, September 2010 - September 2015



The level of freight shipments in September measured by the Freight TSI (123.4) was 0.1 percent below the all-time high level of 123.5 in November 2014 (Table 2A). BTS' TSI records begin in 2000. See historical [TSI data](#).

The August index was revised to 123.2 from 123.5 in last month's release.

The Freight TSI measures the month-to-month changes in freight shipments by mode of transportation in tons and ton-miles, which are combined into one index. The index measures the output of the for-hire freight transportation industry and consists of data from for-hire trucking, rail, inland waterways, pipelines and air freight. Changes in global trade will not directly affect the TSI, which measures domestic freight shipments.

Trend: The Freight TSI has virtually returned to its all-time high reached in November 2014 following a period in which there were five monthly increases, four monthly decreases and one month that was unchanged. The index was just 0.1 percent lower than the November peak. After dipping to 94.7 in April 2009, the index rose 30.3 percent in the succeeding 77 months. For additional historical data, go to [TSI data](#)

The Freight TSI increased in the third quarter of 2015 by 1.0 percent, the largest quarterly increase since the third quarter of 2014.

Analysis: The Freight TSI increase was limited to fewer modes than it has been in many previous months – trucking, air freight and pipeline showed significant gains, while rail carload, rail intermodal and waterborne decreased. While there was a decline in the Federal Reserve Board Industrial Production index, which TSI often tracks, other indicators of the general economy – employment, personal income, and housing starts – all increased.

Index highs and lows: Freight shipments in September 2015 (123.4) were 30.3 percent higher than the recent low in April 2009 during the recession (94.7). The September 2015 level was 0.1 percent below the historic peak reached in November 2014 (123.5).

Year to date: Freight shipments measured by the index were up 0.7 percent in September compared to the end of 2014 (Table 3).

Long-term trend: Freight shipments are up 15.3 percent in the five years from the post-recession level of September 2010 and are up 10.8 percent in the 10 years from September 2005 (Table 5).

Same month of previous year: September 2015 freight shipments were up 1.5 percent from September 2014 (Tables 4, 5).

3rd quarter changes: The Freight TSI rose 1.0 percent in the third quarter following a decline of 0.5 percent in the second quarter (Table 10).

The TSI has three seasonally adjusted indexes that measure changes from the monthly average of the base year of 2000. The three indexes are freight shipments, passenger travel and a combined measure that merges the freight and passenger indexes. See [Seasonally-Adjusted Transportation Data](#) for numbers for individual modes. TSI includes data from 2000 to the present. Release of the October 2015 index is scheduled for Dec. 9.

Passenger Index: The TSI for passengers fell 0.7 percent in September from its August level (Table 6). The Passenger TSI September 2015 level of 122.9 was 2.5 percent above the September 2014 level (Table 7). The index is up 8.6 percent in five years and up 11.3 percent in 10 years (Table 5). The passenger TSI measures the month-to-month changes in travel that involves the services of the for-hire passenger transportation sector. The seasonally-adjusted index consists of data from air, local transit and intercity rail.

Combined Index: The combined freight and passenger TSI rose 0.3 percent in September from its August level (Table 8). The combined TSI September 2015 level of 123.3 was 1.7 percent above the September 2014 level (Table 9). The combined index is up 13.1 percent in five years and up 10.7 percent in 10 years (Table 5). The combined TSI merges the freight and passenger indexes into a single index.

Revisions: Monthly data has changed from previous releases due to the use of concurrent seasonal analysis, which results in seasonal analysis factors changing as each month's data are added.

BTS research has shown a clear relationship between economic cycles and the Freight and Passenger Transportation Services Indexes. See a [study of this relationship](#) using smoothed and detrended TSI data. Researchers who wish to compare TSI over time with other economic indicators, can use the [FRED database](#), which includes freight, passenger and combined TSI, and which makes it possible to easily graph TSI alongside the other series in that database. See [TSI data on FRED](#).

For a webinar on the TSI, see [Past Webinars](#). For a video explanation of the TSI, see [Overview of the Transportation Services Index](#). A BTS report explaining the TSI, [Transportation Services Index and the Economy](#), is available for download.

Table 1: Freight, Passenger and Combined Transportation Services Indexes since March 2015
Percent Change from Previous Month
(Seasonally Adjusted, Monthly Average of 2000 = 100)

	Freight		Passenger		Combined	
	Index	Pct. Change	Index	Pct. Change	Index	Pct. Change
March	122.8	1.6	120.7	1.9	122.3	1.7
April	121.7	-0.9	121.3	0.5	121.7	-0.5
May	122.3	0.5	121.6	0.2	122.2	0.4
June	122.2	-0.1	122.3	0.6	122.3	0.1
July	123.2	0.8	124.4	1.7	123.6	1.1
August	123.2	0.0	122.0	-1.9	122.9	-0.6
September	123.4	0.2	122.9	0.7	123.3	0.3

SOURCE: Bureau of Transportation Statistics

NOTE: Percent changes based on numbers prior to rounding.

Table 2: Freight Transportation Services Index Monthly Changes, 2012-2015
Percent change from previous month

	2012	2013	2014	2015
	% Change	% Change	% Change	% Change
January	-2.6	1.9	-1.5	0.2
February	0.2	0.9	1.0	-1.5
March	-0.8	0.3	1.6	1.6
April	0.5	-0.6	0.5	-0.9
May	0.6	0.7	0.3	0.5
June	0.9	0.5	-0.8	-0.1
July	-0.4	-0.1	1.3	0.8
August	-0.6	0.3	-0.1	0.0
September	-0.3	0.2	0.6	0.2
October	-1.7	-0.2	0.6	
November	1.5	2.2	1.0	
December	0.2	-0.8	-0.8	

SOURCE: Bureau of Transportation Statistics

Table 2A: Freight Transportation Services Index by Month, 2012-2015

	2012	2013	2014	2015
January	111.9	114.2	116.3	122.8
February	112.1	115.2	117.5	120.9
March	111.2	115.5	119.4	122.8
April	111.8	114.8	120.0	121.7
May	112.5	115.6	120.4	122.3
June	113.5	116.2	119.4	122.2
July	113.1	116.1	121.0	123.2
August	112.4	116.5	120.9	123.2
September	112.1	116.7	121.6	123.4
October	110.2	116.5	122.3	
November	111.9	119.1	123.5	
December	112.1	118.1	122.5	

SOURCE: Bureau of Transportation Statistics

Table 3: Freight, Passenger and Combined Transportation Services Indexes Year-to-Date Change, 2006-2015
Percent change to September from December of the previous year

Year	Freight	Passenger	Combined
2006	0.5	1.7	0.9
2007	-1.1	3.4	0.3
2008	-3.2	-3.6	-3.3
2009	-0.9	-0.7	-0.9
2010	5.5	2.5	4.6
2011	2.5	1.8	2.2
2012	-2.4	-0.1	-1.6
2013	4.1	1.0	3.3
2014	3.0	1.6	2.6
2015	0.7	1.5	0.9

SOURCE: Bureau of Transportation Statistics

Table 4: Freight Transportation Services Index from Year-to-Year Percent Change in the September Freight TSI
(Monthly average of 2000 = 100)

	September Freight TSI	Percent change from same month previous year
2006	112.9	1.3
2007	109.4	-3.1
2008	107.2	-2.0
2009	99.3	-7.4
2010	107.0	7.8
2011	111.3	4.0
2012	112.1	0.7
2013	116.7	4.1
2014	121.6	4.2
2015	123.4	1.5

SOURCE: Bureau of Transportation Statistics

NOTE: Percent changes based on numbers prior to rounding.

**Table 5: Transportation Services Indexes from Previous Years
Percent Change to 2015 (September to September)**

Since September ...	Duration in years	Freight TSI Percent change to September 2015	Passenger TSI Percent change to September 2015	Combined TSI Percent change to September 2015
2014	1	1.5	2.5	1.7
2013	2	5.7	4.8	5.4
2012	3	10.1	6.2	8.8
2011	4	10.9	6.7	9.6
2010	5	15.3	8.6	13.1
2009	6	24.3	12.2	20.4
2008	7	15.1	9.6	13.2
2007	8	12.8	4.6	10.1
2006	9	9.3	11.0	9.6
2005	10	10.8	11.3	10.7

SOURCE: Bureau of Transportation Statistics

**Table 6: Passenger Transportation Services Index Monthly Changes, 2012-2015
Percent change from previous month**

	2012 % Change	2013 % Change	2014 % Change	2015 % Change
January	-0.6	0.7	-0.5	-1.4
February	1.8	0.1	0.1	-0.8
March	-1.0	-0.9	1.9	1.9
April	-0.3	0.9	-0.1	0.5
May	-0.6	-0.2	0.6	0.2
June	0.3	0.7	-0.6	0.6
July	-0.3	-0.8	0.2	1.7
August	0.7	0.8	0.3	-1.9
September	0.1	-0.3	-0.2	0.7
October	-1.9	0.4	0.6	
November	1.9	0.7	-0.9	
December	0.4	-0.5	1.3	

SOURCE: Bureau of Transportation Statistics

Table 7: Passenger Transportation Services Index from Year-to-Year
Percent change in the September Passenger TSI
(Monthly average of 2000 = 100)

	September Passenger TSI	Percent change from same month previous year
2006	110.7	0.3
2007	117.5	6.1
2008	112.1	-4.6
2009	109.5	-2.3
2010	113.2	3.4
2011	115.2	1.8
2012	115.7	0.4
2013	117.3	1.4
2014	119.9	2.2
2015	122.9	2.5

SOURCE: Bureau of Transportation Statistics

NOTE: Percent changes based on numbers prior to rounding.

Table 8: Combined Transportation Services Index Monthly Changes, 2012-2015
Percent change from previous month

	2012 % Change	2013 % Change	2014 % Change	2015 % Change
January	-2.0	1.6	-1.2	-0.2
February	0.7	0.6	0.8	-1.4
March	-0.9	-0.1	1.7	1.7
April	0.3	-0.1	0.3	-0.5
May	0.3	0.4	0.4	0.4
June	0.7	0.6	-0.8	0.1
July	-0.4	-0.4	1.0	1.1
August	-0.2	0.5	0.1	-0.6
September	-0.2	0.1	0.3	0.3
October	-1.8	0.0	0.6	
November	1.6	1.7	0.4	
December	0.2	-0.8	-0.2	

SOURCE: Bureau of Transportation Statistics

Table 9: Combined Transportation Services Index from Year-to-Year
Percent change in the September Combined TSI
(Monthly average of 2000 = 100)

	September Combined TSI	Percent change from same month previous year
2006	112.5	1.0
2007	112.0	-0.4
2008	108.9	-2.8
2009	102.4	-6.0
2010	109.0	6.4
2011	112.5	3.2
2012	113.3	0.7
2013	117.0	3.3
2014	121.2	3.6
2015	123.3	1.7

SOURCE: Bureau of Transportation Statistics

NOTE: Percent changes based on numbers prior to rounding.

Table 10: Freight Transportation Services Index Change by Quarter, 2006-2015
Percent change from the last month of the previous quarter

Year	1st Quarter (Jan-Mar) % Growth	2nd Quarter (Apr-Jun) % Growth	3rd Quarter (Jul-Sep) % Growth	4th Quarter (Oct-Dec) % Growth
2006	-0.4	1.0	-0.1	-2.0
2007	1.1	-1.9	-0.3	1.2
2008	-0.7	0.0	-2.5	-6.5
2009	-4.3	0.2	3.3	2.1
2010	4.0	0.9	0.6	1.5
2011	1.8	-0.4	1.0	3.2
2012	-3.2	2.1	-1.2	0.0
2013	3.0	0.6	0.4	1.2
2014	1.1	0.0	1.8	0.7
2015	0.2	-0.5	1.0	

SOURCE: Bureau of Transportation Statistics

Table 11: Passenger Transportation Services Index Change by Quarter, 2006-2015
Percent change from the last month of the previous quarter

Year	1st Quarter (Jan-Mar) % Growth	2nd Quarter (Apr-Jun) % Growth	3rd Quarter (Jul-Sep) % Growth	4th Quarter (Oct-Dec) % Growth
2006	2.0	-0.1	-0.2	2.6
2007	2.6	0.1	0.7	-1.0
2008	0.3	-0.2	-3.7	-1.6
2009	-1.5	0.0	0.8	0.8
2010	0.3	1.1	1.2	0.0
2011	0.3	0.7	0.8	0.5
2012	0.2	-0.7	0.4	0.3
2013	-0.1	1.5	-0.3	0.6
2014	1.4	-0.1	0.3	1.0
2015	-0.3	1.3	0.5	

SOURCE: Bureau of Transportation Statistics

Table 12: Combined Transportation Services Index Change by Quarter, 2006-2015
Percent change from the last month of the previous quarter

Year	1st Quarter (Jan-Mar) % Growth	2nd Quarter (Apr-Jun) % Growth	3rd Quarter (Jul-Sep) % Growth	4th Quarter (Oct-Dec) % Growth
2006	0.4	0.6	-0.1	-0.7
2007	1.5	-1.2	0.0	0.5
2008	-0.4	-0.1	-2.8	-5.1
2009	-3.5	0.1	2.6	1.8
2010	2.8	0.9	0.8	1.0
2011	1.4	-0.1	0.9	2.4
2012	-2.2	1.2	-0.7	0.0
2013	2.1	1.0	0.2	0.9
2014	1.3	-0.1	1.4	0.8
2015	0.1	0.0	0.8	

SOURCE: Bureau of Transportation Statistics

Brief Explanation of the TSI

The Transportation Services Index (TSI) is a measure of the month-to-month changes in the output of services provided by the for-hire transportation industries. The freight index measure changes in freight shipments while the passenger index measures changes in passenger travel.

The TSI tells us how the output of transportation services has increased or decreased from month to month. The index can be examined together with other economic indicators to produce a better understanding of the current and future course of the economy. The movement of the index over time can be compared with other economic measures to understand the relationship of changes in transportation output to changes in Gross Domestic Product (GDP).

The freight transportation index consists of:

For-hire trucking,

Railroad freight services (including rail based intermodal shipments such as containers on flat cars),

Inland waterways transportation,

Pipeline transportation (including principally petroleum and petroleum products and natural gas), and

Air freight.

The index does not include international or coastal waterborne movements, private trucking, courier services, or the US Postal Service.

The passenger transportation index consists of:

Local transit,

Intercity passenger rail, and

Passenger air transportation.

The index does not include intercity bus, sightseeing services, ferry services, taxi service, private automobile usage, or bicycling and other non-motorized transportation.